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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,228	03/19/2001	Noriyoshi Shida	040894-5642	6917

9629 7590 10/20/2003

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EXAMINER

HECKENBERG JR, DONALD H

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/810,228

Applicant(s)

SHIDA ET AL.

Examiner

Donald Heckenberg

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 31, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on August 1, 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 1722

1. The following is a quotation of the first paragraph of 35

U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 3 have been amended to recite that "the temperature of [the] conduction member is different from that of [the] mold bodies." This feature of the apparatus has not previously been disclosed, and thus constitutes new matter.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 1722

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai (U.S. Pat. No. 5,593,710; previously of record).

Asai teaches an injection molding apparatus. The injection mold comprises a pair of mold bodies (50 and 70) which are disposed in a manner such that circular-shaped mold forming surfaces are opposed to each other to form a disc-shaped mold space (see figure 4). A conduction member (25) is fitted into a first of the pair of mold bodies so as to communicate with the outside through a conduction path (23) for conducting molten material injected from the outside into the molding space. A first member (72) is disposed between the conduction member and the first mold body (see figure 1). A second member (52) is positioned opposing to the first member on the second mold body side of the pair of mold bodies (see figure 4).

Although Asai does not described the first and second members (72 and 52) as being for suppressing heat, the members would inherently act as such. The first and second members, regardless of the material from which they are made, will have a

Art Unit: 1722

heat capacity that will act to suppress at least some heat from flowing through them..

Claims 1 and 3 recite the mold to be as such that "the temperature of [the] conduction member is different from that of [the] mold bodies." The temperature of the parts of the mold is dependent on the intended use of the mold. Specifically, the temperature would depend in part on the particular molding material being used. It is well settled that the intended use of an apparatus is not germane to the issue of patentability of the apparatus. If the prior art structure is capable of performing the claimed use, then it meets the claim limitation(s). In re Casey, 370 F.2d 576, 580 152 USPQ 235, 238 (CCPA 1967); In re Otto, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In the instant case, Asai discloses a mold with induction aperture (23) and a mold body (70) provided with separate heat control structures (79). Thus, the apparatus of Asai is capable of operating with the conduction member and the mold bodies at different temperatures, and therefore meets the claim limitations directed at the different temperatures of the conduction material and mold bodies.

5. Applicant's arguments filed July 31, 2003 have been fully considered but they are not persuasive.

Art Unit: 1722

With respect to the rejection under 35 U.S.C. § 102(b) based on Asai, Applicants submit that Asai shows in figure 6 that a "female cutter 25 is disposed between the center bushing 72 and a sprue bushing 20 and connected to a mirror plate 70, thereby the heat from the sprue bushing 22 being transmitted to the mirror plate 70 through the female cutter 25." Thus, Applicant concludes that the bushing 72 cannot function as a heat suppressing member as claimed in the instant application.

As Applicants assert, the female cutter is disposed between the sprue bushing 22 and the bushing 72. Applicants' argument seems to be that the cutter would block all the heat emanating from the sprue bushing, and thus, that the bushing 72 cannot act to suppress any heat. However, the cutter would not act to completely block all the heat from the sprue from being transmitted to the mold block. While the cutter may have a large heat capacity (the disclosure of Asai does not state from what material the cutter is constructed), at least some heat would still be conducted through the cutter, especially given the high temperatures required for injection molding. Thus, as the bushing 72 is disposed between the cutter and the mirror plate, the bushing 72 would act to suppress heat conducted through the cutter from being transmitted to the mold body-mirror block.

Art Unit: 1722

6. Claims 5 and 7-8 are allowed. See the reasons for indicating allowable subject matter in the previous Office Actions.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

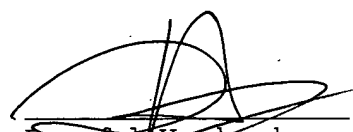
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald


Art Unit: 1722

Heckenberg whose telephone number is (703) 308-6371. The examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 972-9306. The unofficial fax phone number is (703) 305-3602.



Donald Heckenberg
October 8, 2003



JAMES P. MACKEY
PRIMARY EXAMINER
10/14/03